

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Christopher A. Kitze

Serial No. 09/881,523

Filed: 06/14/2001

For: **EFFICIENT TRANSPORTATION OF DIGITAL FILES IN A PEER-TO-PEER
FILE DELIVERY NETWORK**

Examiner: Harish T. Dass

Art Unit: 3628

Mail Stop Appeal Brief – Patents

Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

Sir:

An **APPEAL BRIEF** is filed herewith. Appellant also encloses a payment in the amount of \$1520.00 as required by 37 C.F.R. § 1.17(c) for this Appeal Brief and for a Three-month Extension of Time and requests that this be considered a petition therefor. If any additional fees are required in association with this appeal brief, the Director is hereby authorized to charge them to Deposit Account 50-1732, and consider this a petition therefor.

APPEAL BRIEF

(1) REAL PARTY IN INTEREST

The present application is owned by Qurio Holdings, Inc. with a principal place of business at 1130 Situs Court, Suite 216, Raleigh, North Carolina 27606.

(2) RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences to the best of Appellant's knowledge.

(3) STATUS OF CLAIMS

Claims 1-46 were rejected with the rejection made final on February 27, 2006.

Claims 1-46 are pending and the subject of this appeal.

(4) STATUS OF AMENDMENTS

All amendments have been entered to the best of Appellant's knowledge.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

Appellant's invention is directed to a method and system for efficiently transporting digital files over a peer-to-peer network. The network includes at least one server node and multiple client nodes. When a digital file is to be transferred over the network from a sending node to a receiving node, other nodes are allowed to submit bids to transport the file over the peer-to-peer network for a particular price. The node with the lowest bid is then allowed to transport the file to the receiving node, thereby optimizing network traffic based on economics (Specification, p. 4, lines 5-13).

In particular, claim 1 recites a method for efficiently transporting digital files (Figure 1B, Files 20a and 20b) over a peer-to-peer network (Figure 1A, peer-to-peer network 10) comprising at least one server node (Figures 1A and 1B, server node 12) and multiple client nodes (Figure 1A, client nodes 14), the method comprising the steps of:

a. when a digital file is to be transferred over the network from a sending node to a receiving node, allowing other nodes to submit bids to transport the file over the peer-to-peer network for a particular price (Specification, p. 4, lines 8-11; p. 9, lines 12-16; and p. 13, line 7 through p. 14, line 8; see also, Figure 2B, steps 126 and 128); and

b. allowing the node with a lowest bid to transport the file to the receiving node, thereby optimizing network traffic based on economics (Specification, p. 4, lines 11-13; p. 9, lines 16-18; p. 14, line 17 through p. 15, line 8; and p. 16, lines 10-13; see also Figure 2C, steps 130 and 136).

Claim 10 is an independent claim directed to a peer-to-peer network according to the present invention. Claim 10 recites a peer-to-peer network (Figure 1A, peer-to-peer network 10) for efficiently transporting digital files (Figure 1B, Files 20a and 20b), the network including at least one server node (Figures 1A and 1B, server node 12) and multiple client nodes (Figure 1A, client nodes 14) coupled to the network, the network further comprising:

means for allowing other nodes to submit bids to transport a digital file over the peer-to-peer network for a particular price when the file is to be transferred from a sending node to a receiving node (Specification, p. 4, lines 8-11; p. 9, lines 12-16; and p. 13, line 7 through p. 14, line 8; see also, Figure 2B, steps 126 and 128); and

means for allowing the node with a lowest bid to transport file to the receiving node, thereby optimizing network traffic based on economics (Specification, p. 4, lines 11-13; p. 9,

lines 16-18; p. 14, line 17 through p. 15, line 8; and p. 16, lines 10-13; see also, Figure 2C, steps 130 and 136). The means for allowing other nodes to submit bids to transport a digital file over the peer-to-peer network is a server node (such as node 12 or 14), optionally with a web page (Specification, p. 13, lines 7-20; see also, Figures 1A and 1B). The means for allowing the node with a lowest bid to transport file is also the server node (such as node 12 or 14) (Specification, p. 14, line 17 through p. 15, line 8; see also, Figures 1A and 1B). It is important to realize that a particular client node 12 can also be a server node 14 (Figures 1A and 1B; see also, Specification, p. 6, lines 1-11; p. 7, lines 1-10 and 20-23, and p. 13, lines 13-20).

Claim 19 is an independent claim similar to claim 1, but written in method form. Claim 19 recites a method for efficiently transporting digital files (Figure 1B, Files 20a and 20b) comprising,

a. providing a peer-to-peer network (Figure 1A, peer-to-peer network 10) that includes at least one server node (Figures 1A and 1B, server node 12) and multiple client nodes (Figure 1A, client node 14);

b. when a digital file is to be transferred over the peer-to-peer network from a sending node to a receiving node, allowing other nodes to submit bids to transport the file over the peer-to-peer network for a particular price (Specification, p. 4, lines 8-11; p. 9, lines 12-16; and p. 13, line 7 through p. 14, line 8; see also, Figure 2B, steps 126 and 128);

c. allowing the node with a lowest bid to transport to file to the receiving node (Specification, p. 4, lines 11-13; p. 9, lines 16-18; p. 14, line 17 through p. 15, line 8; and p. 16, lines 10-13; see also, Figure 2C, steps 130 and 136); and

d. billing a user account of the sending node, and paying a user of the transporting node the particular price, thereby optimizing network traffic based on economics (Specification, p. 8, lines 5-10, p. 11, line 20 through p. 12, line 4; and p. 15, lines 10-13; see also, Figure 2A, step 112 and Figure 2C, step 134).

Independent claim 26 is a system claim in means plus function format. Claim 26 recites a peer-to-peer network (Figure 1A, peer-to-peer network 10) for efficiently transporting digital files (Figure 1B, Files 20a and 20b), the network including at least one server node (Figures 1A and 1B, server node 12) and multiple client nodes (Figure 1A, client node 14) coupled to the network, the network further comprising:

means for allowing other nodes to submit bids to transport a digital file over the network for a particular price when the file is to be transferred over the network from a sending node to a receiving node (Specification, p. 4, lines 8-11; p. 9, lines 12-16; and p. 13, line 7 through p. 14, line 8; see also, Figure 2B, steps 126 and 128);

means for allowing the node with a lowest bid to transport the file to the receiving node (Specification, p. 4, lines 11-13; p. 9, lines 16-18; p. 14, line 17 through p. 15, line 8; and p. 16, lines 10-13; see also, Figure 2C, steps 130 and 136); and

means for billing a user account of the sending node, and paying a user of the transporting node the particular price, thereby optimizing network traffic based on economics (Specification, p. 8, lines 5-10; p. 11, line 20 through p. 12, line 4; and p. 15, lines 10-13; see also Figure 2A, step 112 and Figure 2C, step 134).

The means for allowing other nodes to submit bids to transport a digital file over the peer-to-peer network is a server node (such as node 12 or 14 in Figures 1A and 1B), optionally with a web page (Specification, p. 13, lines 7-20; see also, Figures 1A and 1B). The means for allowing the node with a lowest bid to transport file is also the server node (such as node 12 or 14) (Specification, p. 14, line 17 through p. 15, line 8; see also Figures, 1A and 1B). The means for billing a user account of the sending node and paying a user of the transporting node the particular price is the client application 22 of node 14 (Figure 1; see also, Specification, p. 11, line 20 through p. 12, line 4). It is important to realize that a particular client node 12 can also be a server node 14 (Figures 1A and 1B; see also, Specification, p. 6, lines 1-11; p. 7, lines 1-10 and 20-23; and p. 13, lines 13-20).

Claim 33 is an independent claim that recites a method for efficiently transporting digital files (Figure 1B, Files 20a and 20b), comprising the steps of:

a. allowing a user to become a member of a network (such as peer-to-peer network 10, Figure 1A) by installing and executing a copy of a peer-to-peer client application (client application 22, Figure 1A) on the user's computer (Specification, p. 9, line 22 through p. 10, line 4; see also, Figure 2A, step 100);

b. receiving registration information entered by the user, and generating a user account (Specification, p. 10, lines 6-16; see also, Figure 2A, steps 102 and 104);

c. in response to the user publishing one or more files, prompting the user to select a quality of service for file delivery (Specification, p. 11, lines 10-20; see also, Figure 2A, steps 108 and 110);

d. calculating a total fee to charge the user for delivery of the file and automatically billing the user's account (Specification, p. 11, line 20 through p. 12, line 4; see also, Figure 2A, step 112);

e. offering delivery of the file up for bidding from a central location (Specification, p. 13, lines 7-11; see also, Figure 2B, step 126)

f. accepting bids to transport the file from other nodes (Specification, p. 13, lines 13-20; see also, Figure 2B, step 128);

g. comparing the received bids and choosing the node that submitted a lowest price to transport the file (Specification, p. 14, line 17 through p. 15, line 8; see also, Figure 2C, step 130); and

h. paying a user of the transporting node, thereby allowing the user of the transporting node to generate extra revenue and optimizing network traffic based on economics (Specification, p. 15, lines 10-12; and p. 16, lines 10-13; see also, Figure 2C, step 134).

Independent claim 45 recites a peer-to-peer network (Figure 1A, peer-to-peer network 10) for efficiently transporting digital files (Figure 1B, Files 20a and 20b), the network including at least one server node (Figures 1A and 1B, server node 12) and multiple client nodes (Figure 1A, client node 14) coupled to the network, the network further comprising:

other nodes (such as server nodes 12 and client nodes 14, Figure 1A) adapted to submit bids to transport a digital file over the peer-to-peer network for a particular price when the file is to be transferred from a sending node to a receiving node (Specification, p. 4, lines 8-11; p. 9, lines 12-16; and p. 13, line 7 through p. 14, line 8; see also, Figure 2B, steps 126 and 128); and

wherein one node of the other nodes with a lowest bid to transport the file to the receiving node is selected to transport the file, thereby optimizing network traffic based on economics (Specification, p. 4, lines 11-13; p. 9, lines 16-18; p. 14, line 17 through p. 15, line 8; and p. 16, lines 10-13; see also, Figure 2C, steps 130 and 136).

Independent claim 46 recites a peer-to-peer network (Figure 1A, peer-to-peer network 10) for efficiently transporting digital files (Figure 1B, Files 20a and 20b), the network including

at least one server node (Figures 1A and 1B, server node 12) and multiple client nodes (Figure 1A, client nodes 14) coupled to the network, the network further comprising:

other nodes (such as server nodes 12 and client nodes 14, Figure 1A) adapted to submit bids to transport a digital file over the network for a particular price when the file is to be transferred over the network from a sending node (such as server nodes 12 or client node 14, Figure 1A) to a receiving node (such as server node 12 and client node 14, Figure 1A) (Specification, p. 4, lines 8-11; p. 9, lines 12-16; and p. 13, line 7 through p. 14, line 8; see also Figure 2B, steps 126 and 128);

one of the other nodes being selected based on the one of the other nodes having a lowest bid to transport to file to the receiving node (Specification, p. 4, lines 11-13; p. 9, lines 16-18; p. 14, line 17 through p. 15, line 8; and p. 16, lines 10-13; see also, Figure 2C, steps 130 and 136); and

the one of the other nodes selected to transport the file further adapted to bill a user account of the sending node, such that a user of the transporting node is paid the particular price, thereby optimizing network traffic based on economics (Specification, p. 8, lines 5-10; p. 11, line 20 through p. 12, line 4; and p. 15, lines 10-13; see also, Figure 2A, step 112 and Figure 2C, step 134).

Dependent claims 3 and 12 are patentable for a separate reason and are therefore discussed separately. Claim 3 depends from claim 1 and recites the additional step of “billing the user of the sending node.” Claim 12 depends from claim 10 and adds the limitation of “wherein a user of the sending node is billed.” Support for these limitations are found in the Specification at p. 8, lines 5-10; p. 11, line 20 through p. 12, line 4; p. 15, lines 10-13, and in Figure 2A, step 112 and Figure 2C, step 134.

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Whether claims 1-3, 10-12, 19, 26, 45, and 46 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,167,124 to Johnson et al. (hereinafter “Johnson”) in view of U.S. Patent No. 6,647,373 to Carlton-Foss (hereinafter “Carlton-Foss”).

B. Whether claims 4-9, 13-18, 20-25, and 27-32 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson in view of Carlton-Foss and further in view of U.S. Patent No. 6,295,294 to Odlyzko (hereinafter “Odlyzko”).

C. Whether claims 33-44 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson in view of Odlyzko and further in view of U.S. Patent No. 6,012,045 to Barzilai et al. (hereinafter “Barzilai”).

(7) ARGUMENT

A. Introduction

The rejections of claims 1-46 under 35 USC § 103(a) are improper for the following reasons:

- The combination of Johnson and Odlyzko is improper because there is insufficient support for the asserted motivation to combine these references.
- The Johnson and Odlyzko references are non-analogous art.
- With respect to each independent claim (claims 1, 10, 19, 26, 33, 45, and 46), Johnson, taken alone or in combination with other cited references, fails to teach or suggest the claim limitation “when a digital file is to be transferred over the peer-to-peer network from a sending node to a receiving node, allowing other nodes to submit bids to transport the file over the network for a particular price. . . .”
- With respect to claims 3, 12, and 19, the Johnson and Carlton-Foss references do not teach or suggest the claim limitation “billing the user of the sending node.”
- With respect to claim 33, the Johnson, Odlyzko, and Barzilai references fail to teach or suggest the claim limitations “automatically billing the user’s account”, “accepting bids to transport the file from other nodes” and “in response to the user publishing one or more files, prompting the user to select a quality of service for file delivery.”

After consideration of the Arguments which follow, Appellant respectfully requests that the Board reverse the Examiner and instruct the Examiner to allow all pending claims.

B. Summary of the References

1. U.S. Patent No. 6,167,124 to Johnson

Johnson is directed to a method and system where telecommunication switches route toll-free calls in accordance with least cost routing resulting from an auction process between participating carriers. In particular, the auction process is to provide competition between

service providers to carry 1-800 telephone calls (Johnson, Abstract). A moderator provides each carrier with bid information from other carriers so that the carriers will have the opportunity thereafter to submit a lower or higher bid (Johnson, Abstract). In this arrangement, the carriers send to the moderator the rate it is willing to charge for service between two specific switching points on one or more telecommunication networks, from an originating switching point to a toll-free call's specific switching point, at some particular time. (Johnson, col. 2, lines 59-65).

2. U.S. Patent No. 6,647,373 to Carlton-Foss

Carlton-Foss is directed to the conducting of an interactive reverse auction over a computer network (Carlton-Foss, col. 1, lines 14-16). Carlton-Foss provides, in a computer network enabling communication between a host computer and a plurality of remote bidders, or between a peer computer and a plurality of peer bidders, a system and method for transmitting and processing reverse auction information (Carlton-Foss, col. 3, lines 13-37). The system includes a post means for posting product descriptions, a bidding means for submitting a plurality of bids, means for transmitting other information about goods and bidders, a means for evaluating the bids, and a security means (Carlton-Foss, Abstract).

3. U.S. Patent No. 6,295,294 to Odlyzko

Odlyzko relates to the regulation of network traffic, in particular, to limiting congestion in packet switched network traffic (Odlyzko, col. 1, lines 5-8). A network is partitioned into logical channels and a user incurs a certain different cost for the use of each of the channels (Odlyzko, Abstract). Each user will select a channel that provides the subjectively optimal balance of cost and perceived quality of service (Odlyzko, Abstract). Network traffic will be distributed between channels and each user will incur predictable charges without being precluded from seeking a higher quality of service when desired (Odlyzko, Abstract).

4. U.S. Patent No. 6,012,045 to Barzilai

Barzilai is directed to a computer-based method of selling or purchasing consumer products and services via an electronic bid, auction, and sale system (Barzilai, col. 1, lines 7-10). The computer system electronically establishes a virtual showroom, accessible by the consumer's computers, which displays consumer goods and services, and information regarding

the commonly available selling price for each product and service (Barzilai, Abstract). For example, the system displays the MSRP, a minimum opening bid price, information regarding the make, model, manufacturer, or distributor of the offered good, and bid cycle data revealing the open, close, and acceptance dates for the bids (Barzilai, Abstract).

C. The Standards for Establishing Obviousness

Section 103(a) of the Patent Act provides the statutory basis for an obviousness rejection and reads as follows:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Courts have interpreted 35 U.S.C. § 103(a) as being a question of law based on underlying facts. As the Federal Circuit stated:

Obviousness is ultimately a determination of law based on underlying determinations of fact. These underlying factual determinations include: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) the extent of any proffered objective indicia of nonobviousness.

Monarch Knitting Mach. Corp. v. Sulzer Morat GmBH, 139 F.3d 877, 881 (Fed. Cir. 1998) (internal citations omitted).

The burden is on the Patent Office to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.3d 1071, 1074 (Fed. Cir. 1988). “To reach a proper conclusion under § 103, the decisionmaker must step backward in time and into the shoes worn by [a person having ordinary skill in the art] when the invention was unknown and just before it was made.” *Id.* at 1073 (quoting *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1566 (Fed. Cir. 1987) (paraphrase in *Fine*’s original text)). “One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.” *In re Fine* at 1075.

The “case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *In re Dembiczak*, 175

F.3d 994, 999 (Fed. Cir. 1999). “Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor’s disclosure as a blueprint for piecing together the prior art to defeat patentability - the essence of hindsight.” *Ibid*.

The Federal Circuit notes

that evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved . . . The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not “evidence.”

Ibid (internal citations omitted). It is worth noting that the *Dembiczak* court specifically acknowledged *Fine*, but emphasized the requirement for actual evidence in proving the motivation to combine the references.

To rely on a reference under 35 U.S.C. 103, it must be analogous prior art. MPEP § 2141.01(a); *see also In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992) (“In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.”). “A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his problem.” *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992); MPEP § 2141.01(a).

For a *prima facie* case of obviousness, the combination must teach or fairly suggest all the claim elements. *In re Royka*, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. If the Patent Office fails to establish obviousness, then the Appellant is entitled to a patent. *In re Glaug*, 283 F.3d 1335, 1338 (Fed. Cir. 2002).

D. Claims 1-3, 10-12, 19, 26, 45, and 46 Are Not Obvious over Johnson in View of Carlton-Foss

1. The Patent Office Failed to Meet its Burden of Establishing a Motivation to Combine the Prior Art Johnson and Carlton-Foss References

Claims 1-3, 10-12, 19, 26, 45 and 46 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Johnson in view of Carlton-Foss. For the Patent Office to combine prior art references to create an obviousness rejection, the Patent Office must do two

things. First, the Patent Office must state the motivation to combine the references, and second, the Patent Office must support its asserted motivation to combine the prior art references with a clear and particular showing of actual evidence demonstrating that the asserted motivation exists. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Appellant appeals the rejection of claims 1-3, 10-12, 19, 26, 45, and 46 because the Patent Office has not properly supported its asserted motivation to combine the Johnson and Carlton-Foss references with actual evidence demonstrating that the asserted motivation exists. Appellant notes that Carlton-Foss has been cited by the Examiner only to teach a peer-to-peer network, and that the Examiner alleges Johnson teaches all of the other limitations of claims 1-3, 10-12, 19, 26, 45, and 46 (Final Office Action mailed February 27, 2006, p. 2). Thus, the Patent Office merely cites to Carlton-Foss as an example of a generic reference that discloses a peer-to-peer network. The fact that the Patent Office cites a generic peer-to-peer reference that it pulled off the shelf cuts against the asserted motivation to combine as the Patent Office has provided no evidence as to why one of ordinary skill in the art would combine Carlton-Foss with Johnson.

In the Final Office Action, the Patent Office asserted that the motivation to combine the Johnson and Carlton-Foss references was “to allow the bidder to submit/transmit data across network using peer-to-peer network securely.” (Final Office Action mailed February 27, 2006, page 3, lines 1-4). The Patent Office, however, failed to provide any evidence whatsoever supporting the asserted motivation to combine the references. Instead, the Patent Office relied on a broad conclusory statement contrary to the requirements of *Dembiczak*.

The subsequent Advisory Action appears to alter the originally asserted motivation. Specifically, the Advisory Action states that it would have been obvious to combine the references to “securely submit (send) and receive bids electronically from plurality proposers (bidder) for reverse auction.” (Advisory Action mailed May 9, 2006, p. 2, citing to Carlton-Foss, col. 3, lines 9-45). Then the Patent Office quotes the following two partial sentences from the cited portion of Carlton-Foss:

“submitting a plurality of proposals across the network in response to the request and/or specification, the bids including financial information, a description of the goods and services to be provided, information about the bidder including one or more pointers to bidder addresses such as an email address and a World Wide Web address, receiving means for receiving the plurality of bids sent across the network by a plurality of proposers” and

“enabling communication between one peer computer and a plurality of other peer computers, a reverse auction information.” *Ibid.*

These sentences from Carlton-Foss do not support the stated motivation of sending and receiving bids securely. There is no mention at all of security in the cited portions of Carlton-Foss. Carlton-Foss does not disclose a need or desire to send and receive bids securely. In addition, Johnson likewise fails to mention a need or desire to send and receive bids securely. Johnson is directed to an auction service to stimulate competition between service providers for the routing of toll-free calls (Johnson, Abstract). In fact, Johnson actually discloses a bidding moderator providing the bidding carriers with bid information from the other carriers so that the bidding carriers can change their bid accordingly. Thus, in Johnson, secure bids are not necessary since the bids are disclosed to the other carriers. Therefore, there is no need for Johnson to look to Carlton-Foss to submit data securely and therefore no need for Johnson to use a peer-to-peer network.

The Patent Office has failed to meet its burden by providing actual evidence to support its asserted motivation. Instead, the Patent Office initially just relied upon a broad conclusory statement without any supporting evidence, contrary to the Federal Circuit’s holding in *Dembiczak*. Then, the sentences from the Carlton-Foss reference cited by the Patent Office in the Advisory Action do not support the stated motivation of securely sending and receiving bids since the cited sentences do not even mention security or securely sending bids. Finally, since Johnson discloses the bids to the competing carriers, there is no need in Johnson for securely sending or receiving bids. Since there is no evidence to support the stated motivation to combine and the stated motivation is not necessary in Johnson, the combination is improper. Thus, the rejection based on the combination is improper and should be withdrawn.

2. Johnson Is Non-Analogous Prior Art

To rely on a reference under 35 U.S.C. 103, it must be analogous prior art. MPEP § 2141.01(a); see also *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992) (“In order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.”). “A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the

matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.” *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992); MPEP § 2141.01(a).

Johnson is not analogous art. Johnson is directed to telecommunication network control, specifically low cost routing of toll-free calls. Telecommunication switches route toll-free calls in accordance with least cost routing resulting from an auction process between participating carriers. In particular, the auction process is to provide competition between service providers to carry 1-800 telephone calls (Johnson, Abstract). A moderator provides each carrier with bid information from other carriers so that the carriers will have the opportunity thereafter to submit a lower or higher bid (Johnson, Abstract). In this arrangement, the carriers send to the moderator the rate they are willing to charge for service between two specific switching points on one or more telecommunication networks, from an originating switching point to a toll-free call's specific switching point, at some particular time. (Johnson, col. 2, lines 59-65).

In contrast, Appellant's invention is directed to a method and system for efficiently transporting digital files over a peer-to-peer network. The network includes at least one server node and multiple client nodes. When a digital file is to be transferred over the network from a sending node to a receiving node, other nodes are allowed to submit bids to transport the file over the peer-to-peer network for a particular price. The node with the lowest bid is then allowed to transport the file to the receiving node, thereby optimizing network traffic based on economics (Specification, p. 4, lines 5-13).

Johnson is not analogous art because Appellant's invention is directed to efficiently transporting **digital files** over a **peer-to-peer network**. Johnson routes 1-800 telephone calls over a telecommunication network. Digital files are not the same as 1-800 telephone calls. A peer-to-peer network is significantly different from a telecommunication network for routing telephone calls. The U.S. Patent classifications and fields of search are different for Johnson and the present invention. Applicant's field of endeavor is handling digital files and assets in a peer-to-peer network. This is a different field of endeavor than that of Johnson routing 1-800 telephone calls in a telecommunication network. Based on the differences between the fields of the inventions in Johnson and Appellant's invention, it is clear that Johnson is not in the field of Applicant's endeavor. MPEP §2141.01(a); *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992).

Johnson is also not reasonably pertinent to the particular problem with which the inventor was concerned, namely efficiently transporting digital files stored in centralized servers on a

peer-to-peer network. (Specification, pp. 1-4). Gaining access to centralized digital files throughout the Internet was an issue prior to Appellant's invention due to growing Internet congestion, limited bandwidth, and increasing file size. (Specification, p. 1, lines 13-15). One way to address the issue is to decentralize the digital content through peer-to-peer networks, but peer-to-peer networks have disadvantages as well. (Specification, p. 2, line 19 through p. 3, line 23). The present invention provides a more efficient method for transporting the digital files across a peer-to-peer network by taking advantage of unused network bandwidth. (Specification, p. 4, lines 1-19). Johnson is not reasonably pertinent to the problem addressed by Appellant. Johnson is not directed to gaining access to digital files located throughout the Internet. Nothing in Johnson would be useful in addressing Internet congestion, limited bandwidth, and increasing digital file size. Likewise, Johnson does not disclose peer-to-peer networks at all, so nothing in Johnson would be helpful in addressing the disadvantages of such networks. Accordingly, Johnson would not logically have commended itself to the attention of the inventor of Appellant's invention and therefore is not reasonably pertinent to the particular problem with which the inventor of Appellant's invention was concerned. *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992); MPEP § 2141.01(a).

Since Johnson is not in the field of Appellant's endeavor and is also not reasonably pertinent to the particular problem with which the inventor was concerned, Johnson is non-analogous prior art. Since Johnson is non-analogous prior art, the combination is improper for this additional reason. Since the combination is improper, the rejection based on the combination is improper and should be withdrawn.

3. The Combination of Johnson and Carlton-Foss Does Not Teach Each and Every Element of the Claimed Invention

The Patent Office is also required to show that each and every claim element can be found in the combination of references to establish *prima facie* obviousness. *In re Royka*, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. Claim 1 is directed to a method for efficiently transporting digital files over a peer-to-peer network comprising at least one server node and multiple client nodes, the method comprising the steps of:

a. when a digital file is to be transferred over the network from a sending node to a receiving node, allowing other nodes to submit bids to transport the file over the peer-to-peer network for a particular price; and

b. allowing the node with a lowest bid to transport the file to the receiving node, thereby optimizing network traffic based on economics.

Although required by independent claims 1, 10, 19, 26, 33, 45, and 46, neither Johnson nor Carlton-Foss, alone or in combination, teach or suggest the claim limitation “when a digital file is to be transferred over the peer-to-peer network from a sending node to a receiving node, allowing other nodes to submit bids to transport the file over the network for a particular price. . .” The Patent Office asserts this element is shown by Johnson’s abstract; col. 2, line 45 through col. 3, line 26; col. 3, lines 46-65; and col. 20, lines 30-44 (Final Office Action mailed February 27, 2006, p. 2). Appellant respectfully disagrees. As discussed in detail below, all the cited passages from Johnson generally discuss the transmission of data and video over a telecommunications network wherein bids for transmission are based on time and bandwidth availability. This is contrary to the present invention in which bids are submitted based on the time that a digital file is to be transferred.

Johnson’s abstract describes a bidding service, wherein carriers submit bids and the moderator provides the carriers with information about the bids of other carriers, for at least a portion of all point-to-point routes for which any carrier has submitted a bid (Johnson, Abstract). In Johnson, telecommunication switches route toll-free calls in accordance with least cost routing resulting from an auction process between participating carriers. In particular, the auction process is to provide competition between service providers to carry 1-800 telephone calls (Johnson, Abstract). Nothing in the abstract describes the timing or event that triggers the bid. The Patent Office focuses on this statement in the Advisory Action and states that this limitation is not claimed (Advisory Action mailed May 19, 2006, p. 2). Appellant agrees the claim does not include this exact language. The statement that “Nothing in the abstract [of Johnson] describes the timing or event trigger” is made merely to point out that Johnson’s Abstract does not discuss at all the timing of bids or what triggers the bids (i.e., the Abstract is silent as to when bids are submitted) and therefore cannot teach allowing the submission of bids “when a digital file is to be transferred over the network from a sending node to a receiving node”, as required by the claimed invention.

Johnson also discusses the submission of bids by the carriers to the moderator and further indicates that the bid may be for routes over different types of communication networks and for different classes of telecommunication services provided by such networks (data, audio, or video). (Johnson, col. 3, lines 14-19). However, the bids are submitted for providing service between two specific switching points on one or more telecommunications networks from an originating switching point to a terminating switching point at some particular time (see Johnson, col. 2, lines 59-65). There is no indication that the submission of bids is tied to “when a digital file is to be transferred,” as recited in claim 1. In fact, there is no submission of bids to transport a file. Rather, the submission of bids in Johnson is for providing 1-800 telephone service between two switching points.

Johnson, in col. 3, lines 36-65, indicates that the bids are sent to the other carriers so that the bids may be adjusted if needed or desired. However, nothing in this passage ties the submission of the bids to “when a digital file is to be transferred,” as recited in claim 1. Thus, this passage does not teach the claim element.

Johnson, in col. 20, lines 30-44, confirms that voice, data, and video communication services are contemplated over packet data networks. However, this passage does not indicate that the submission of bids occurs “when a digital file is to be transferred,” as recited in claim 1. Thus, this passage does not teach the claim element.

Furthermore, nothing in Johnson pointed to by the Patent Office in the Advisory Action (see page 2 of the Advisory Action mailed May 19, 2006) shows the required claim element.

Although the claimed invention specifically requires the bids to be submitted when the digital file is to be transferred, the Patent Office has failed to show any passage from Johnson that discloses a bid submission linked to a file transfer. Rather, Johnson contemplates bids for service between two switching points for whatever service is required.

The distinction between Johnson and the claimed invention is even more pronounced when is considered that Johnson further teaches that (1) a bid is for service between two switching points **at some particular time** (Johnson, col. 2, lines 59-65, emphasis added); and (2) the results of the bidding process are updated only periodically (Johnson, col. 4, lines 10-12). Since Johnson discloses bids that are for services at some particular time and the results of the bidding process are only updated periodically (so that carriers have a chance to adjust their bid),

it is clear that the submission of bids in Johnson is not “when a digital file is to be transferred over the network.”

As discussed above, Carlton-Foss was cited only for disclosing a peer-to-peer network, Carlton-Foss does not teach or suggest the required claim element and therefore cannot cure the deficiencies of Johnson.

Since the references individually do not teach or suggest each and every limitation of claim 1, the combination does not teach or suggest each and every limitation of claim 1. Claim 1 is therefore patentable over Johnson and Carlton-Foss.

Claims 2 and 3 depend from claim 1 and are not obvious for at least for the same reasons.

4. The Combination of Johnson and Carlton-Foss Also Does Not Teach Each and Every Element of Independent Claims 10, 19, 26, 45, and 46

The Patent Office is also required to show that each and every claim element can be found in the combination of references to establish *prima facie* obviousness. *In re Royka*, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. Claim 10 is directed to a peer-to-peer network for efficiently transporting digital files, the network including at least one server node and multiple client nodes coupled to the network, the network further comprising:

means for allowing other nodes to submit bids to transport a digital file over the peer-to-peer network for a particular price when the file is to be transferred from a sending node to a receiving node; and

means for allowing the node with a lowest bid to transport to file to the receiving node, thereby optimizing network traffic based on economics.

Appellant initially notes that Johnson does not disclose a peer-to-peer network. Although Carlton-Foss does mention a peer-to-peer network, to reach the claimed invention of claim 10, the appropriate combination would have to be the network of Carlton-Foss and the system of Johnson. As set forth above in sections D.1. and D.2., the Examiner has failed to support the motivation to combine these references with the requisite evidence, and Johnson is non-analogous art and cannot be combined with Carlton-Foss to attempt to teach or suggest the claimed invention. In addition, trying to combine the system of Johnson with Carlton-Foss would render Carlton-Foss unsuitable for its intended purpose of conducting an interactive

reverse auction over a computer network. MPEP §2143.01. Since the combination of Carlton-Foss and Johnson is improper, claim 10 and the claims that depend from claim 10 are patentable.

In addition, claim 10 recites “means for allowing other nodes to submit bids to transport a digital file over the network for a particular price **when the file is to be transferred from a sending node to a receiving node. . .**” (emphasis added). The highlighted portion of the claim is essentially the same as that addressed above with respect to claim 1; thus, claim 10 is allowable for the same reasons as claim 1. Claims 11-18 depend from claim 10 and are allowable for at least the same reasons.

Claim 19 recites “**when a digital file is to be transferred over the peer-to-peer network from a sending node to a receiving node**, allowing other nodes to submit bids to transport the file. . .” (emphasis added). This element is essentially the same as that addressed above, with respect to claim 1; thus, claim 19 is allowable for the same reasons as claim 1. Claims 20-25 depend from claim 19 and are allowable for at least the same reasons.

Claim 26 recites “means for allowing other nodes to submit bids to transport a digital file over the network for a particular price **when the file is to be transferred over the network from a sending node to a receiving node. . .**” (emphasis added). This element is essentially the same as that addressed above with respect to claim 1; thus, claim 26 is allowable for the same reasons as claim 1. Claims 27-32 depend from claim 26 and are allowable for at least the same reasons.

Claims 45 and 46 correspond to original claims 10 and 26 respectively, but are presented without means plus function language. Claims 45 and 46 are patentable for at least the same reasons as claims 10 and 26.

5. The Combination of Johnson and Carlton-Foss Does Not Teach the Additional Limitation of “Billing the User of the Sending Node” as Required by Claims 3, 12, and 19

Claims 3, 12, and 19 are patentable for a separate reason. Claim 3 recites “billing the user of the sending node.” In contrast, Johnson is a 1-800 billing system. The carriers bill the 800 customer for using the node, not the sender (see Johnson, col. 2, lines 20-22). The Patent Office asserts that this element is shown by Johnson, col. 22, lines 25-65. Appellant respectfully traverses this assertion. The passage cited by the Examiner confirms that the 1-800 customer is billed, not the sending node. Thus, this passage actually teaches the opposite of what is claimed.

Since this passage teaches the opposite of what is claimed, Johnson does not teach or suggest each and every element of claim 3. Carlton-Foss does not cure the deficiencies of Johnson with respect to claim 3. Since the references individually do not teach or suggest each and every limitation of claim 3, the combination does not teach or suggest each and every limitation of claim 3. Claim 3 is therefore patentable over Johnson and Carlton-Foss.

In the Advisory Action, the Patent Office asserts that it is “well known that usage bill is send [sic] to sender, unless specifically directed to other parties. For example, all calls made from a company A phones (sender) are billed to the company A, unless it is collect call, similarly for individuals” (Advisory Action mailed May 19, 2006, p. 2). First of all, the Patent Office provides no evidence or citation to support the statement that it is well known that a usage bill is sent to the sender. More importantly, the statement by the Patent Office is contrary to the standard practice for 1-800 calls, as disclosed in Johnson. In the 1-800 system of Johnson, the carriers bill the 1-800 customer for using the node, not the sender (see Johnson, col. 2, lines 20-22). Thus, the Patent Office’s statement in the Advisory Action is unsupported and contrary to the teachings of Johnson, and therefore cannot be relied upon to show that the limitation of claim 3 is met in Johnson, alone or in combination with the other cited art.

Claim 12 (“wherein a user of the sending node is billed”) and claim 19 (“billing a user account of the sending node”) also recite similar limitations to claim 3 and are separately patentable for the reasons set forth above with respect to claim 3.

E. Claims 4-9, 13-18, 20-25, and 27-32 Are Not Obvious over Johnson in View of Carlton-Foss and Odlyzko

1. The Patent Office Failed to Meet Its Burden of Establishing a Motivation to Combine the Johnson, Carlton-Foss, and Odlyzko References

Claims 4-9, 13-18, 20-25, and 27-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson and Carlton-Foss, and further in view of Odlyzko. As set forth above, for the Patent Office to combine prior art references to create an obviousness rejection, the Patent Office must do two things. First, the Patent Office must state the motivation to combine the references, and second, the Patent Office must support its asserted motivation to combine the prior art references with a clear and particular showing of actual evidence demonstrating that the asserted motivation exists. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Appellant appeals from the rejection of claims 4-9, 13-18, 20-25, and 27-32 because the Patent Office has

not properly supported its asserted motivation to combine the Johnson, Carlton-Foss, and Odlyzko references with actual evidence demonstrating that the asserted motivation exists. Specifically, the Patent Office asserts that the motivation to combine the references is “allowing a user to specify different channels for different types of communications for obtaining a high quality of service when needed for transmitting electronic files (such as news downloads).” (Final Office Action mailed February 27, 2006, pp. 5-6). As set forth above in sections D.1. and D.2., the combination of Johnson and Carlton-Foss is improper. The Examiner provides no further explanation of why all three of these references would be combined. Notably, the offered motivation is the same stated motivation supplied by the Examiner when combining only Johnson and Odlyzko in the Office Action mailed September 23, 2005 (Office Action mailed September 23, 2005, p. 5). This asserted motivation lacks the actual evidence required by the Federal Circuit in *Dembiczak*. Lacking the required evidence of motivation, the combination cannot support the obviousness rejection.

2. Odlyzko Is Non-Analogous Prior Art

In addition, Odlyzko, like Johnson, is not even analogous art. Odlyzko is directed to regulation of telecommunications network traffic, particularly limiting congestion in a packet switched network. A network is partitioned into logical channels and a user incurs a certain different cost for the use of each of the channels (Odlyzko, Abstract). Each user will select a channel that provides the subjectively optimal balance of cost and perceived quality of service (Odlyzko, Abstract). Network traffic will be distributed between channels and each user will incur predictable charges without being precluded from seeking a higher quality of service when desired (Odlyzko, Abstract).

In contrast, as discussed above, Appellant’s invention is directed to a method and system for efficiently transporting digital files over a peer-to-peer network. Since Odlyzko is directed to regulating telecommunications network traffic, it is not in the field of Applicant’s endeavor, namely transporting digital files over a peer-to-peer network. MPEP §2141.01(a). Odlyzko partitions a network into logical channels and charges different costs for the use of each of the channels in order to regulate traffic over the communication network. Traffic over a telecommunication network is not the same as transporting digital files or assets over a peer-to-peer network. A peer-to-peer network is significantly different from a telecommunication

network. The U.S. Patent classifications and fields of search are different for Odlyzko and the present invention. Applicant's field of endeavor is handling digital files and assets in a peer-to-peer network. This is a different field of endeavor than that of Odlyzko, regulating traffic in a telecommunication network. Based on the differences between the fields of the inventions in Odlyzko and Appellant's invention, it is clear that Odlyzko is not in the field of Applicant's endeavor. MPEP § 2141.01(a); *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992).

Odlyzko is also not reasonably pertinent to the particular problem with which the inventor was concerned, namely efficiently transporting digital files stored in centralized servers on a peer-to-peer network. (Specification, pp. 1-4). Gaining access to centralized digital files throughout the Internet was an issue prior to Appellant's invention due to growing Internet congestion, limited bandwidth, and increasing file size. (Specification, p. 1, lines 13-15). One way to address the issue is to decentralize the digital content through peer-to-peer networks, but peer-to-peer networks have disadvantages as well. (Specification, p. 2, line 19 through p. 3, line 23). The present invention provides a more efficient method for transporting the digital files across a peer-to-peer network by taking advantage of unused network bandwidth. (Specification, p. 4, lines 1-19). Just like Johnson, Odlyzko is not reasonably pertinent to the problem addressed by Appellant. Like Johnson, Odlyzko is not directed to gaining access to digital files located throughout the Internet. Likewise, Odlyzko does not disclose peer-to-peer networks at all, so nothing in Odlyzko would be helpful in addressing the disadvantages of such networks. Accordingly, Odlyzko would not logically have commended itself to the attention of the inventor of Appellant's invention and therefore is not reasonably pertinent to the particular problem with which the inventor of Appellant's invention was concerned. *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992); MPEP § 2141.01(a).

Since Odlyzko is not in the field of Appellant's endeavor and is also not reasonably pertinent to the particular problem with which the inventor was concerned, Odlyzko is non-analogous prior art. Since Odlyzko is non-analogous prior art, the combination is improper for this additional reason. Since the combination is improper, the rejection based on the combination is improper and should be withdrawn.

3. The Combination of Johnson, Carlton-Foss, and Odlyzko Does Not Teach Each and Every Limitation of Claims 4-9, 13-18, 20-25, and 27-32

The Patent Office is also required to show that each and every claim element can be found in the combination of references to establish *prima facie* obviousness. *In re Royka*, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. As discussed above, Johnson does not teach that the bids are allowed “when a digital file is to be transferred,” as recited in claims 1, 10, 19, and 26. Nothing in Carlton-Foss or Odlyzko cures the deficiencies of Johnson. Claims 4-9, 13-18, 20-25, and 27-32 depend from claims 1, 10, 19, and 25, respectively, and thus contain the same element. Since the references individually do not teach or suggest the claim element, the combination cannot teach or suggest the claim element. Since the combination does not teach or suggest the claim element, the combination does not establish obviousness.

F. Claims 33-44 Are Not Obvious over Johnson in View of Odlyzko and Barzilai

1. The Combination of Johnson, Odlyzko, and Barzilai Is Improper

Claims 33-44 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Johnson in view of Odlyzko and Barzilai et al. (hereinafter “Barzilai”). The standards for establishing obviousness are set forth above. First, the rejection is improper because the Patent Office still has not set forth the actual evidence to combine Johnson and Odlyzko, as explained above. Since this underlying combination is improper, the rejection is improper. Since the rejection is improper, the claims are allowable.

The rejection is also improper because the Patent Office has not properly supported the motivation to combine Barzilai with the other references. Specifically, the Patent Office states that the motivation is “to allowing [sic] a paying members to submit bids for different channels for different types of communications for obtaining a high quality of service when needed for transmitting electronic files” (Final Office Action mailed February 27, 2006, page 8). This asserted motivation also lacks the evidence required by the Federal Circuit in *Dembiczak*. Lacking the required evidence of motivation, the combination cannot support the obviousness rejection. Appellant therefore requests withdrawal of the § 103(a) rejection and allowance of the rejected claims on this basis.

2. The Combination of Johnson, Odlyzko, and Barzilai Does Not Teach Each and Every Limitation of Claims 33-44

The Patent Office is also required to show that each and every claim element can be found in the combination of references to establish *prima facie* obviousness. *In re Royka*, 490 F.2d 981 (CCPA 1974); MPEP § 2143.03. As discussed above, Johnson does not teach each and every limitation of the claims. Claim 33 recites “accepting bids to transport the file from other nodes”. As discussed above, Johnson does not bid on transporting a particular file, as recited in the claim. Johnson’s bids are for a particular time and a particular originating switch and terminating switch. Johnson does not teach bidding on transporting a particular file. The Patent Office points to nothing in Odlyzko or Barzilai that cures the deficiencies of Johnson. Thus, the combination of references does not teach or suggest the claim element. Since the combination does not teach or suggest the claim element, the combination does not establish obviousness.

Claim 33 also recites “in response to the user publishing one or more files, prompting the user to select a quality of service for file delivery.” The Patent Office seems to be saying that the distributing discussed at col. 3, lines 47-55 of Johnson teaches this limitation. (Final Office Action mailed February 27, 2006, p. 7). The cited passage only discloses that after a new bid is submitted by a carrier and processed by the moderator, the moderator will distribute at least a portion of the bid information to other carriers. First of all, the distributing of bid information in Johnson is not equivalent to the user publishing one or more files, as claimed in claim 33. Second, the moderator of Johnson is not the user of the claims. Finally, there is no disclosure of prompting the user to select a quality of service for file delivery. Therefore, Johnson does not teach or suggest all of the elements of claim 33. The Patent Office points to nothing in Odlyzko or Barzilai that cures the deficiencies of Johnson. Thus, the combination of references does not teach or suggest the claim element. Since the combination does not teach or suggest the claim element, the combination does not establish obviousness.

Claims 34-44 depend from claim 33 and are allowable at least for the same reasons.


G. Conclusion

The Patent Office has failed to prove a *prima facie* case of obviousness in the present application. The combination of references is improper because the Patent Office has not properly supported the motivation to combine the references, and the Johnson and Odlyzko references are

non-analogous art. In addition, the Patent Office has not shown where each and every element is taught or suggested in the combined references. In particular, Johnson, alone or in combination with the other cited references, fails to teach or suggest “when a digital file is to be transferred over the peer-to-peer network from a sending node to a receiving node, allowing other nodes to submit bids to transport the file over the network for a particular price. . .” In addition, with respect to claims 3, 12, 19, and 33, the cited references do not teach or suggest billing the user of the sending node. Finally, with respect to claim 33, the cited references also fail to teach or suggest “accepting bids to transport the file from other nodes” and “in response to the user publishing one or more files, prompting the user to select a quality of service for file delivery.” As such, Appellant requests that the Board reverse the Examiner and instruct the Examiner to allow the claims.

Respectfully submitted,

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(8) APPENDIX

1. A method for efficiently transporting digital files over a peer-to-peer network comprising at least one server node and multiple client nodes, the method comprising the steps of:
 - a. when a digital file is to be transferred over the network from a sending node to a receiving node, allowing other nodes to submit bids to transport the file over the peer-to-peer network for a particular price; and
 - b. allowing the node with a lowest bid to transport the file to the receiving node, thereby optimizing network traffic based on economics.
2. The method of claim 1 further including the step of paying a user of the transporting node the particular price.
3. The method of claim 2 further including the step of billing a user of the sending node.
4. The method of claim 1 further including the step of allowing a sender to specify a particular quality of service for delivery of the file, the quality of service including immediate delivery and scheduled delivery.
5. The method of claim 4 further including the step of setting the price to transport the file based on the quality of service specified.
6. The method of claim 5 further including the step of if the specified quality of service is immediate delivery, then sending the file peer-to-peer.
7. The method of claim 6 further including the step of if the specified quality of service is immediate delivery and the receiving node is off-line, uploading the file from the sending node to the server node, and delivering the file from the server node when receiving node comes online.
8. The method of claim 6 further including the step of if the specified quality of service is scheduled delivery, then queuing file transmission until a scheduled time.

9. The method of claim 4 further including the step of requiring the submitted bids to include price and the quality of service.

10. A peer-to-peer network for efficiently transporting digital files, the network including at least one server node and multiple client nodes coupled to the network, the network further comprising:

means for allowing other nodes to submit bids to transport a digital file over the peer-to-peer network for a particular price when the file is to be transferred from a sending node to a receiving node; and

means for allowing the node with a lowest bid to transport to file to the receiving node, thereby optimizing network traffic based on economics.

11. The network of claim 1 wherein a user of the transporting node is paid the particular price.

12. The network of claim 11 wherein a user of the sending node is billed.

13. The network of claim 10 wherein a sender specifies a particular quality of service for delivery of the file, wherein the quality of service includes immediate delivery and scheduled delivery.

14. The network of claim 13 wherein the price to transport the file is determined based on the quality of service specified.

15. The network of claim 14 wherein the file is sent peer-to-peer if the specified quality of service is immediate delivery.

16. The network of claim 15 wherein if the specified quality of service is immediate delivery and the receiving node is off-line, then the file is uploaded from the sending node to the server node, and the file is delivered from the server node when receiving node comes online.

17. The network of claim 15 wherein if the specified quality of service is scheduled delivery, then the file is queued for transmission until a scheduled time.
18. The network of claim 10 wherein the submitted bids include price and a quality of service.
19. A method for efficiently transporting digital files comprising,
- a. providing a peer-to-peer network that includes at least one server node and multiple client nodes;
 - b. when a digital file is to be transferred over the peer-to-peer network from a sending node to a receiving node, allowing other nodes to submit bids to transport the file over the peer-to-peer network for a particular price;
 - c. allowing the node with a lowest bid to transport the file to the receiving node; and
 - d. billing a user account of the sending node, and paying a user of the transporting node the particular price, thereby optimizing network traffic based on economics.
20. The method of claim 19 further including the step of allowing a sender to specify a particular quality of service for delivery of the file, the quality of service including immediate delivery and scheduled delivery.
21. The method of claim 20 further including the step of setting the price to transport the file based on the quality of service specified.
22. The method of claim 21 further including the step of if the specified quality of service is immediate delivery, then sending the file peer-to-peer.
23. The method of claim 22 further including the step of if the specified quality of service is immediate delivery and the receiving node is off-line, uploading the file from the sending node to the server node, and delivering the file from the server node when receiving node comes online.
24. The method of claim 23 further including the step of if the specified quality of service is

scheduled delivery, then queuing file transmission until a scheduled time.

25. The method of claim 24 further including the step of requiring the submitted bids to include price and a quality of service.

26. A peer-to-peer network for efficiently transporting digital files, the network including at least one server node and multiple client nodes coupled to the network, the network further comprising:

means for allowing other nodes to submit bids to transport a digital file over the network for a particular price when the file is to be transferred over the network from a sending node to a receiving node;

means for allowing the node with a lowest bid to transport to file to the receiving node;
and

means for billing a user account of the sending node, and paying a user of the transporting node the particular price, thereby optimizing network traffic based on economics.

27. The network of claim 26 wherein a sender specifies a particular quality of service for delivery of the file, wherein the quality of service includes immediate delivery and scheduled delivery.

28. The network of claim 27 wherein the price to transport the file is determined based on the quality of service specified.

29. The network of claim 28 wherein the file is sent peer-to-peer if the specified quality of service is immediate delivery.

30. The network of claim 29 wherein if the specified quality of service is immediate delivery and the receiving node is off-line, then the file is uploaded from the sending node to the server node, and the file is delivered from the server node when receiving node comes online.

31. The network of claim 30 wherein if the specified quality of service is scheduled delivery,

then the file is queued for transmission until a scheduled time.

32. The network of claim 31 wherein the submitted bids include price and the quality of service.

33. A method for efficiently transporting digital files, comprising the steps of:

- a. allowing a user to become a member of a network by installing and executing a copy of a peer-to-peer client application on the user's computer;
- b. receiving registration information entered by the user, and generating a user account;
- c. in response to the user publishing one or more files, prompting the user to select a quality of service for file delivery;
- d. calculating a total fee to charge the user for delivery of the file and automatically billing the user's account;
- e. offering delivery of the file up for bidding from a central location;
- f. accepting bids to transport the file from other nodes;
- g. comparing the received bids and choosing the node that submitted a lowest price to transport the file; and
- h. paying a user of the transporting node, thereby allowing the user of the transporting node to generate extra revenue and optimizing network traffic based on economics.

34. The method of claim 33 wherein step (b) further includes the step of generating a digital certificate for the user that includes a public key and a private key.

35. The method of claim 34 wherein step (b) further includes the step of storing the user's account information and the user's public key and private key in at least one database accessible by a server node.

36. The method of claim 35 wherein step (c) further includes the step of publishing the file by making the file publicly available on the network for searching by other client nodes by adding the file to a searchable index of shared files on the server node.

37. The method of claim 36 wherein step (c) further includes the step of publishing the file for

direct file transfer.

38. The method of claim 37 wherein step (d) further includes the step of showing the user a fee charged for each level of quality of service.

39. The method of claim 38 further including the step of digitally signing the file and storing the digital signature on the server node for file authentication.

40. The method of claim 39 further including the step of uploading a copy of the file to the server node so that when the recipient node is off-line at the time the file is to be delivered, the server node can deliver the file when recipient node comes back on-line.

41. The method of claim 40 wherein step (e) further includes the step of providing the offer as an entry on a web page that includes a name and size of the file, a chosen quality of service, a location of the recipient, and a bid submission time limit.

42. The method of claim 41 wherein step (f) further includes the step of identifying in the bid a bidding node, and a predetermined price and quality of service for delivering the file.

43. The method of claim 42 wherein step (g) further includes the step of choosing the bid that has the lowest price and that matches the quality of service in the offer.

44. The method of claim 43 wherein step (g) further includes the step of providing the node that submitted the chosen bid with information necessary to transport the file across the network.

45. A peer-to-peer network for efficiently transporting digital files, the network including at least one server node and multiple client nodes coupled to the network, the network further comprising:

other nodes adapted to submit bids to transport a digital file over the peer-to-peer network for a particular price when the file is to be transferred from a sending node to a receiving node; and

wherein one node of the other nodes with a lowest bid to transport the file to the receiving node is selected to transport the file, thereby optimizing network traffic based on economics.

46. A peer-to-peer network for efficiently transporting digital files, the network including at least one server node and multiple client nodes coupled to the network, the network further comprising:

other nodes adapted to submit bids to transport a digital file over the network for a particular price when the file is to be transferred over the network from a sending node to a receiving node;

one of the other nodes being selected based on the one of the other nodes having a lowest bid to transport to file to the receiving node; and

the one of the other nodes selected to transport the file further adapted to bill a user account of the sending node, such that a user of the transporting node is paid the particular price, thereby optimizing network traffic based on economics.

(9) EVIDENCE APPENDIX

Appellant relies on no evidence, thus this appendix is not applicable.

(10) RELATED PROCEEDINGS APPENDIX

As there are no related proceedings, this appendix is not applicable.